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10/518,504	12/20/2004	Jaakko Rajaniemi	089229.00040	7990
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EXAMINER				
CHAI, LONGBIT				
ART UNIT		PAPER NUMBER		
2431				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,504

Applicant(s)

RAJANIEMI, JAAKKO

Examiner

LONGBIT CHAI

Art Unit

2431

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. Currently pending claims are 14 – 26.

Response to Arguments

2. Applicant's arguments with respect to the subject matter of the instant claims have been fully considered but are not persuasive.

3. As per claim 14, 25 and 26, Applicant asserts that McIntosh (& Ala-Laurila) does not teach (a) a specific accounting server out of several possible accounting servers (Remarks: Page 11 / 2nd Para Line 3 – 4) and (b) an indication of the accounting server, by the authentication server, is dependent on the user (Remarks: Page 11 / 2nd Para Line 9 – 10).

Examiner respectfully disagrees with the following rationale:

- Regarding argument-(a), Examiner notes, according to MPEP 2111, the broadest and reasonable claim interpretations must be made such that a possible accounting server, as recited in the claim, is considered that any server which is constituted with the accounting capability for managing client transaction records / bills can be qualified as a possible accounting server. McIntosh teaches a communication system includes distributed HLRs/VLRs and also each HLR/VLR includes an accounting server / billing server (McIntosh: Para [0061] Line 13 – 14, Para [0080] and Para [0067]) and as such McIntosh does teach a specific accounting server out of several possible accounting servers, as recited in the claim.

- Regarding argument-(b), McIntosh teaches requiring users to enter a username and password, which is passed to the RADIUS server 212 to check that the information is correct, and authorize access to the communication system and subsequently the RADIUS server 212 forwards the accounting packets to a billing server in order to bill telecommunication

charges to an appropriate client party (McIntosh: Para [0067]). Examiner notes RADIUS server 212 (which is also qualified as an authentication server since it checks whether the user information is correct, and authorize access to the communication system) must also provide an indication of the accounting server so that the accounting packet can be forwarded to the indicated accounting server after the authentication of the RADIUS server 212; besides, the billing server, as taught by McIntosh, must contain the user profile information in order to carry out the bill telecommunication charges to an appropriate user and as such McIntosh does teach an indication of the accounting server, by the authentication server, is dependent on the user.

4. As per claim 24, Applicant asserts that "if the Examiner continues to believe that the use of a digital signature signed by the authorization/authentication server so that the fact that the authentication/authorization server made the ticket can be verified by the accounting server would have been obvious, Applicant respectfully requests that the Examiner provide a reference in the next Office Action offering evidence that this is the case" (remarks: Page 15 Last Para). Examiner note the reference Hasebe (U.S. Patent 6,385,726) is presented because Hasebe teaches (a) the center computer is setting authorization for a plurality of user computers for accounting purpose (Figure 5 / Element S12 and Figure 1 / 2) – i.e. the center computer is qualified as an authentication / authorization server and (b) Hasebe also teaches the setting of the utilizing condition should be performed by only the center computer and thus the center computer enciphers the utilizing condition using a key particular to the accounting server or transmits the utilizing condition to which a signature is added (Hasebe: Column 4 Line 20 – 27: a digital signature is used for verification between the authorization center computer and the accounting server).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 14, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by McIntosh et al. (U.S. Patent 2003/0139180).

As per claim 14, 25 and 26, McIntosh teaches a method of providing an accounting service in a mobile communication system, comprising the steps of:

accessing a chargeable functionality of said communication system by a user, by authenticating said user by authentication/authorization server (McIntosh : Page 7, Para [0067] Line 12 – 20), and

authorizing said access of said user by said authentication/authorization server (McIntosh : Page 7, Para [0067] Line 15 – 20); and

indicating, by said authentication/authorization server, a specific accounting server out of several possible accounting server dependent on the user, wherein said accounting server is physically separated from said authentication/authorization server (McIntosh : Para [0061] Line 13 – 14, Para [0080], Para [0067] and Page 10, Para [0096]: Examiner notes, according to MPEP 2111, the broadest and reasonable claim interpretations must be made such that a possible accounting server, as recited in the claim, is considered that any server which is

constituted with the accounting capability for managing client transaction records / bills can be qualified as a possible accounting server. McIntosh teaches a communication system includes distributed HLRs/VLRs and also each HLR/VLR includes an accounting server / billing server (McIntosh: Para [0061] Line 13 – 14, Para [0080] and Para [0067]) and as such McIntosh does teach a specific accounting server out of several possible accounting servers, as recited in the claim and (b) McIntosh teaches requiring users to enter a username and password, which is passed to the RADIUS server 212 to check that the information is correct, and authorize access to the communication system and subsequently the RADIUS server 212 forwards the accounting packets to a billing server in order to bill telecommunication charges to an appropriate client party (McIntosh: Para [0067]). Examiner notes RADIUS server 212 (which is also qualified as an authentication server since it checks whether the user information is correct, and authorize access to the communication system) must also provide an indication of the accounting server so that the accounting packet can be forwarded to the indicated accounting server after the authentication of the RADIUS server 212; besides, the billing server, as taught by McIntosh, must contain the user profile information in order to carry out the bill telecommunication charges to an appropriate user and as such McIntosh does teach an indication of the accounting server, by the authentication server, is dependent on the user).

6. Claims 14 – 17, 19 – 23, 25 – 29 and 31 – 35 are rejected under 35 U.S.C. 102(a) as being anticipated by Ala-Laurila et al. (WO 10/76297 A1).

As per claim 14, Ala-Laurila teaches a method of providing an accounting service in a mobile communication system, comprising the steps of:

accessing a chargeable functionality of said communication system by a user (Ala-Laurila : Page 8, 2nd Para), by authenticating said user by authentication/authorization server (McIntosh : Page 12), and

authorizing said access of said user by said authentication/authorization server (Ala-Laurila : Page 12); and

indicating, by said authentication/authorization server, a specific accounting server out of several possible accounting servers dependent on the user, wherein said accounting server is physically separated from said authentication/authorization server (Ala-Laurila : Page 12 Line 1 – 9: (a) an accounting server of an external telecommunication network is considered as physically separated from said authentication/authorization server (b) the user identity is used to generate billing data and sending the billing data to the corresponding accounting server) (c) please also refer to the section of **Response to Argument**).

As per claim 15 and 27, Ala-Laurila teaches said authentication/authorization server is in a home network of said user (Ala-Laurila : Page 7 Line 24 – 28 and Page 8 Line 21 – 26).

As per claim 16 and 28, Ala-Laurila teaches said chargeable functionality is a service provided in a visited network of said mobile communication system (Ala-Laurila : Page 7 Line 25 – 32 and Page 6 Line 17 – 20: the roaming service is considered as provided with a visited network that is different from the home network).

As per claim 17 and 98, Ala-Laurila teaches said chargeable functionality is a service of said mobile communication system (Ala-Laurila : Page 7 Line 30 – 32 and Page 6 Line 17 – 20).

As per claim 19 and 31, Ala-Laurila teaches said authentication/authorization server directly indicates said specific accounting server to said authentication/authorization client, which specific accounting server is handling said user and keeps a corresponding account (Ala-Laurila : Page 12 Line 1 – 9: (a) an accounting server of an external telecommunication network is considered as physically separated from said authentication/authorization server (b) the user identity is used to generate billing data and sending the billing data to the corresponding accounting server).

As per claim 20 and 32, Ala-Laurila teaches requesting an accounting for said chargeable functionality from said indicated accounting server by said authentication/authorization client (Ala-Laurila : Page 15 Line 1 – 5: chargeable functionality such as the price of the service and the QoS of the service requested by the user must be further forward to the accounting server).

As per claim 21 and 33, Ala-Laurila teaches said authentication/authorization client receives a ticket indicating that said user has been granted to access said chargeable functionality, and said ticket is sent to said accounting server (Ala-Laurila : Page 15 Line 24 – 31).

As per claim 22 and 34, Ala-Laurila teaches said accounting server checks whether accounting for said user is to be started (Ala-Laurila : Page 18 Line 12 – 13).

As per claim 23 and 35, Ala-Laurila teaches said ticket contains at least one of the information of the group of: to which user it belongs, when the access was granted, for how

long the access was granted, and from which client the access was granted (Ala-Laurila :
Page 18 Line 5 – 30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ala-Laurila et al. (WO 10/76297 A1).

As per claim 18 and 30, Ala-Laurila teaches the method according to claim 14 and said accessing step is performed by sending an authentication/authorization request message from an authentication/authorization client to which said user is currently attached to said authentication/authorization server (Ala-Laurila : Page 7 Line 21 – 28). One skilled in the art would recognize that said authentication/authorization server which replies by sending an authentication/authorization answer message to said authentication/authorization client, and wherein said answer message includes said indication of said specific accounting server for said user (Ala-Laurila : Page 14 Line 20 – 23, Page 8 Line 4 – 15 and Page 2 Line 7 – 9) because Ala-Laurila teaches (a) authentication response message includes billing information (a) the user identity is used to generate billing data and sending the billing data to the

corresponding accounting server and as such the billing information is obvious to include the information of selected accounting server).

8. Claims 24 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laurila et al. (WO 10/76297 A1), in view of Hasebe et al. (U.S. Patent 6,385,726).

As per claim 24 and 36, Ala-Laurila does not disclose expressly said ticket is signed by the authentication/authorization server so that it is verified to the accounting server that the authentication/authorization server really has made the ticket.

Hasebe teaches said ticket is signed by the authentication/authorization server so that it is verified to the accounting server that the authentication/authorization server really has made the ticket (Hasebe: Figure 5 / Element S12 and Figure 1 /2 and Column 4 Line 20 – 27: Hasebe teaches (a) the center computer is setting authorization for a plurality of user computers for accounting purpose (Figure 5 / Element S12 and Figure 1 /2) – i.e. the center computer is qualified as an authentication / authorization server and (b) Hasebe also teaches the setting of the utilizing condition should be performed by only the center computer and thus the center computer enciphers the utilizing condition using a key particular to the accounting server or transmits the utilizing condition to which a signature is added (Hasebe: Column 4 Line 20 – 27: a digital signature is used for verification between the authorization center computer and the accounting server).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Hasebe within the system of Ala-Laurila because (a) Ala-Laurila teaches for authenticating in the Internet, shared secret must be provided to the packet data network, which carries accounting information between a network

access server and shared accounting server, so that the authentication can be established in the operating network (Ala-Laurila: Pge 1 Line 7 – 10 / Line 24 – 26 and Page 4 Line 25 – 26), and (b) Hasebe teaches providing an security enhanced mechanism to propose a digital signature to be used for verification between the authorization center computer and the accounting server (Hasebe: Column Column 4 Line 20 – 27).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LONGBIT CHAI whose telephone number is (571)272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Longbit Chai/

Longbit Chai Ph.D
Primary Examiner, Art Unit 2431
11/16/2008